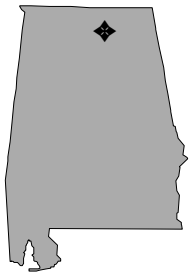
Redstone Arsenal — NPL

Size: 38,300 acres
Mission: Army Aviation and Missile Command
HRS Score: 33.40; placed on NPL in June 1994
IAG Status: Federal Facility Agreement under negotiation
Contaminants: Heavy metals, solvents, SVOCs, CWM, and pesticides
Media Affected: Groundwater, sediment, and soil
Funding to Date: $59.4 million
Estimated Cost to Completion (Completion Year): $281.8 million (FY2008)
Final Remedy in Place and Response Complete Date for All Sites: FY2003



Huntsville, Alabama

Restoration Background

Past operations at the Redstone Arsenal (RSA) include production, receipt and shipment, storage, demilitarization, and disposal of chemical and high-explosive munitions. Commercial chemical pesticides also have been produced at the installation. RSA currently conducts military research and development, manages procurement, and supports the Army's aviation and missile weapons systems.

Environmental studies beginning in FY77 have identified 298 sites at RSA. Of these sites, 216 are Army sites and 82 are sites located at Marshall Space Flight Center, which is the responsibility of NASA. Site types include past disposal sites, landfills, open burning and open detonation (OB/OD) areas, chemical munition disposal sites, and solvent spill sites. Primary contaminants of concern include heavy metals, solvents, semivolatile organic compounds (SVOCs), chemical weapons/munitions (CWM), and pesticides.

In FY94, Interim Remedial Actions (IRAs) began at three dismantled lewisite manufacturing plants, as well as at the closed portions of the OB/OD grounds. Also in FY94, RSA formed a technical review committee and established information repositories at five locations accessible to the public. As part of Interagency Agreement (IAG) negotiations in FY95, the Army identified 11 sites as requiring no further action. All parties agreed to a list of 86 sites that would be covered by the agreement. The installation completed three IRA designs, including three groundwater extraction and treatment systems and a RCRA cap.

In FY96, Site Inspection fieldwork began at 38 sites, Remedial Investigation (RI) activities continued at 39 sites, and Feasibility Study (FS) activities began at 10 sites. The Army constructed a groundwater extraction system and an air stripper and began treating contaminated groundwater in the upper aquifer of the closed sanitary landfill. The Army also submitted a revised draft IAG to the regulatory agencies. RSA officials surveyed the public to determine community interest in forming a Restoration Advisory Board. Little interest was expressed.

In FY97, the installation completed the RCRA cap for the closed lewisite manufacturing plant. All fieldwork for a Removal Action involving an industrial septic tank system was completed. The Army completed No Further Action decision documents for three sites and Proposed Plans for four sites. Three of the plans involved long-term monitoring as the preferred alternative.

The installation improved site management techniques by reorganizing sites into operable units (OUs), developing an installationwide RI work plan and installationwide background and baseline concentrations, and implementing site-specific work plan review meetings to expedite regulatory review processes.

FY98 Restoration Progress

The Army completed construction and the start-up of the groundwater extraction and treatment plant at the OB/OD grounds. Additional extraction wells were installed to maximize the plant's capacity. In addition, the installation prepared and provided to the regulatory agencies for review a decision document and six interim Records of Decision (RODs). Negotiations on the Federal Facility Agreement (FFA) continued.

Construction of the soil vapor extraction (SVE) system for solvent-contaminated soil began at the OB/OD grounds. A horizontal well was used to dewater the soil for the SVE system. Four vertical wells would have been needed to dewater the same area.

RSA partnering initiatives with EPA Region 4 and the Alabama Department of Environmental Management have improved document review time and resulted in more effective, faster decision making. RSA risk managers meet for partnering sessions once a month.

Plan of Action

- Complete all fieldwork in FY99
- Continue negotiations toward an FFA in FY99
- Complete start-up of SVE system–contaminated soil at the OB/OD grounds in FY99
- Complete groundwater extraction and treatment system at the former RSA Rocket Engine Facility North Plant in FY99
- Continue efforts to reach RODs on several OUs in FY99
- Finalize RI/FS in FY99 and FY00

FY99 Funding by Phase and Relative Risk